

<b>NWS FORM E-5</b> (11-88) (PRES. BY WSOM E-41)	<b>U.S. DEPARTMENT OF COMMERCE</b> NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) <b>WFO Jackson, Mississippi</b>
<b>MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS</b>		REPORT FOR: MONTH                      YEAR <b>August                      2003</b>
TO:      Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE <b>Alan Gerard, MIC</b> <b>In Charge of HSA</b>  DATE <b>September 10th , 2003</b>

*When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOME-41)*

### Synopsis...

*Hot and humid with scattered showers and thundershowers....this characterized the weather during much of the month of August.*

*For first 10 days of the month, a large upper level ridge remained anchored to the west of the HSA. Some upper level disturbances swinging around the high pressure ridge made their way into the warm moist air that was in place over the area. For the first week, scattered showers prevailed over most areas; however, by the last several days of the period, only isolated showers occurred mainly over southern sections. Daily rainfall totals ranged from less than .10 inches to over 4 inches. Some heavier 24 rainfall totals occurred at the following sites: Columbus,MS 4.13 inches (6<sup>th</sup>); Forest 4.00 inches (7<sup>th</sup>); Crawford, MS 3.84 inches(4<sup>th</sup>); Philadelphia 3.09 inches (6<sup>th</sup>); Pat Harrison Waterway's Dry Creek Water Park, MS 2.90 inches (3<sup>rd</sup>); and Ackerman, MS 2.66 inches (4<sup>th</sup>).*

*From the 11<sup>th</sup> to the 13<sup>th</sup>, an upper level low drifted through the area kicking off showers over northeast Louisiana and portions of central Mississippi. Rainfall amounts were mostly less than 1.00 inch. Some heavier 24 hour totals occurred at: Collinsville, MS 2.31 inches (13<sup>th</sup>); Kosciusko, MS 2.20 inches (12<sup>th</sup>); and Pat Harrison Waterway's Dunns Falls Water Park 2.08 inches (13<sup>th</sup>).*

*From the 13<sup>th</sup> to 26<sup>th</sup>, an upper air ridge and a typical summertime "Bermuda" high at the surface dominated most of the area. Scattered showers prevailed over the east and the south with very little rainfall elsewhere. Rainfall amounts were 1.00 inch or less with some heavier amounts at Purvis, MS 2.10 inches (17<sup>th</sup>) and at Quitman, MS 2.06 inches (16<sup>th</sup>).*

*From the 27<sup>th</sup> to the end of the month, the upper ridge weakened and the "Bermuda" high shifted east allowing for warm moist gulf air to pour into the state. Afternoon scattered showers and thundershowers were common over the HSA. Much needed rainfall was received in central Mississippi and northeast Louisiana. Rainfall amounts were 1.00 inch or less.*

## River and Soil Conditions...

Soil moisture conditions have dried out somewhat over the past month especially over western sections of the HSA. Soil moisture conditions continue to be above normal especially over eastern sections of Mississippi. While western sections of the state remain near normal. Southeast Arkansas and northeast Louisiana also continue to remain near normal.

No flooding was reported over any of the river systems in the HSA during the month. Minor to moderate rises were observed over the Upper Pearl River system around the first week of August.

With normal to above normal soil moisture conditions and near normal rainfall forecast for the 60 to 90 day period, flood potential for HSA rivers should be slightly above normal for the next 60 to 90 days over central and eastern sections of Mississippi to near normal over western Mississippi, northeast Louisiana, and southeast Arkansas.

## Rainfall for the month of August...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	0.50 to 3.50 inches	Much below normal except slightly above normal over extreme southeast Chicot.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	1.50 to 4.00 inches northern sections  1.00 to 3.00 inches central sections  3.00 to 4.00 inches southern section	Below normal to slightly above normal.  Much below normal to near normal.  Near normal to slightly above normal.
Lower Yazoo	1.25 to 4.00 inches	Much below normal northern sections to above normal over southern sections.
Big Black	3.00 to 7.50 inches upper basin  2.75 to 6.50 inches middle basin  3.00 to 3.50 inches lower basin	Near normal to much above normal.  Below to much above normal.  Near normal.
Homochitto/ Bayou Pierre	1.50 to 3.50 inches	Below normal over the Homochitto basin to near normal over the Bayou Pierre basin.
Pearl (abv Jackson)	5.25 to 8.50 inches	Much above normal.

<i>Pearl (Blo Jackson)</i>	<i>2.00 to 6.0 inches</i>	<i>Below normal over western and southern sections to slightly above normal over northern sections.</i>
<i>Pascagoula</i>	<i>4.00 to 7.50 inches over the Leaf basin.</i> <i>7.00 to 9.00 inches over the Black Creek basin.</i> <i>3.50 to 9.00 inches over the Chickasawhay</i>	<i>Near normal to much above normal.</i> <i>Much above normal.</i> <i>Normal to much above normal.</i>
<i>Tombigbee tributaries in the JAN HSA</i>	<i>4.75 to 10.75 inches</i>	<i>Much above normal.</i>

*The heaviest rainfall amounts in the HSA for the month were: 10.81 inches at Columbus, MS; 10.08 inches at Tibbee, MS; 9.17 inches at Pat Harrison Waterway's Dunns Falls Water Park, MS; 8.68 inches at Topton, MS; 8.56 inches at Philadelphia, MS; 8.45 inches at Shubuta, MS; 7.79 inches at Collinsville, MS; 7.64 inches at Hattiesburg, MS; and 7.53 inches at Meridian, MS.*

*Here at the Jackson WFO, the August monthly rainfall was 4.46 inches, which was 0.80 inches above normal. We had received 44.16 inches of rainfall through the end of August which was 5.24 inches above normal.*

*At the Meridian Key Field, the August monthly rainfall was 7.53 inches, which was 4.19 inches above normal. Meridian had received 54.82 inches through the end of August which was 13.35 inches above normal.*

### **Mississippi River...**

*The Mississippi River experienced a slight rise and crested early in the month from Arkansas City to Natchez. The river continued to fall slowly for the remainder of the month. The provisional high and low stages for August are listed below:*

<i>Location</i>	<i>High Stage(ft)</i>	<i>Date</i>	<i>Low Stage(ft)</i>	<i>Date</i>
<i>Arkansas City, AR</i>	<i>16.20</i>	<i>08/02</i>	<i>4.97</i>	<i>08/31</i>
<i>Greenville, MS</i>	<i>27.69</i>	<i>08/02</i>	<i>16.01</i>	<i>08/31</i>
<i>Vicksburg, MS</i>	<i>21.58</i>	<i>08/03</i>	<i>10.36</i>	<i>08/31</i>
<i>Natchez, MS</i>	<i>28.13</i>	<i>08/04</i>	<i>16.85</i>	<i>08/31</i>

*Products issued...*

*Total Flood Warning products issued: 2*

*Total Flood Statement products issued: 5*

*Daily Rainfall Products (RRA'S) issued 31*

*Daily River Forecast Products (RVS'S) issued: 31*

*Daily River Stage products (RVA'S) issued 31*

*Marty V. Pope  
Service Hydrologist*

*Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.*

*cc: USGS Little Rock District  
USGS Ruston District  
USCE Mobile District  
USCE Vicksburg District  
USCE Mississippi Valley Division  
USGS Mississippi District  
SRH Climate, Weather and Water Division  
LMRFC  
Pearl River Valley Water Supply District  
Hydrologic Information Center  
Southern Region Climate Center  
Pat Harrison Waterway District*